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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,493	06/06/2005	Angelo Bettinzoli	3687-114	4704
23117 7590 11/06/2007 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER ST CLAIR, ANDREW D	
			ART UNIT 4175	PAPER NUMBER
			MAIL DATE 11/06/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/534,493	<b>Applicant(s)</b> BETTINZOLI, ANGELO	
	<b>Examiner</b> Andrew St.Clair	<b>Art Unit</b> 4175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/10/2005</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "ring of flames" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: inconsistent recitation of a claim limitation. Claim 1 introduces "at least one external body" and then later refers to "the external body" in the singular, making it unclear how many external bodies are claimed.

Appropriate correction is required.

4. Claim 12 is objected to because of the following informalities: Typographical error in the preliminary amendment. As amended, claim 12 reads "Burner according to any one of the previous claims claim 1, characterised in that the internal profile of said at least one external body presents, in plan, one or more cavities." Claim 12 is examined on the merits as if it depended solely on claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 3, 5, 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 3, the meaning of the claim limitation “single circuit” is unclear, and has no commonly accepted meaning in the art. While applicant is permitted to be his own lexicographer, this meaning of this term is not clearly defined in the specification.

With respect to claim 5, the limitation “and/or,” followed by a structural limitation, renders the claim indefinite because the scope of what is included in the claim is unclear.

With respect to claim 8, the limitation “two concentric rings of flames, one placed externally the other internally in front of the ring of flames of said central body,” renders the claim indefinite because it is unclear what positional limitation is claimed. Claim 1 recites that the external body is “substantially concentric” with the central body, thus a third ring concentric with the external body would be at least substantially concentric with the central body; it is unclear how one concentric ring can be “internally in front of” another.

With respect to claim 3, the limitation “said means of fluid connection” lacks proper antecedent basis because it is not introduced earlier in the claim nor in any claim from which it depends.

With respect to claim 9, the limitation “the upper wall” lacks proper antecedent basis because it is not introduced earlier in the claim nor in any claim from which it depends.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by De'Longhi et al. (EP 0485645).

With respect to claim 1, De'Longhi et al. disclose a central body 5, having a first ring of flames, and at least one external body 4, fluidly separated from said central body and substantially concentric with it, having at least one second ring of flames, as well as means 9 for separately feeding the mixture of primary air and gas to said central body and to said at least one external body, characterised in that said means for feeding the external body comprise at least one horizontal mixing chamber (10, 11) with a radial Venturi effect (col. 4, ln. 25-28). (De'Longhi et al. is considered to inherently disclose the claimed first and second ring of flames, in that it discloses first and second rings 4, 5 which produce flames.)

With respect to claim 2, De'Longhi et al. disclose the claimed subject matter, characterised in that it comprises one or more inlets 18 for the primary air located above the cooking hob (col. 5, ln. 9-13), and means 6 of fluid connection of said one or more primary air inlets with said means for separately feeding the mixture of primary air and gas to said central body and to said at least one external body.

With respect to claim 3, De'Longhi et al. disclose the claimed subject matter, characterised in that means of fluid connection define a single circuit supplying primary air to

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said means for separately feeding the mixture of primary air and gas. (fig. 2 depicts element 6 allowing passage of air proximate to the outlets of said separately feeding means 9.)

With respect to claim 4, De'Longhi et al further disclose the claimed subject matter, wherein said means for feeding said central body comprise a horizontal mixing chamber with a radial Venturi effect. (fig. 2; col. 4, ln. 25-28).

With respect to claim 5, De'Longhi et al. further disclose the claimed subject matter wherein said horizontal mixing chamber with a radial Venturi effect of said means for feeding said at least one external body and/or of said means for feeding the central body are obtained in said at least one external body and/or in said central body. (fig. 1; feeding means 9 is considered to be "obtained in" the concentric central and external bodies in the same manner disclosed by applicant: it is operatively connected thereto.)

With respect to claim 6, De'Longhi et al. further disclose the claimed subject matter, characterised in that said means for feeding said at least one external body comprise two or more horizontal mixing chambers with a radial Venturi effect. (De'Longhi is considered to have two horizontal mixing chambers, in that "second venturi-effect duct" 11 has an elongated, conical chamber, and a second chamber adjacent to element 7).

With respect to claim 10, De'Longhi et al. disclose a top covering element 5 of said central body, the upper wall of said at least one horizontal mixing chamber with a radial Venturi effect of the means for feeding the central body coinciding with a lower wall of said covering element. (fig. 2).

With respect to claim 11, De'Longhi et al. further disclose the claimed subject matter, wherein said means for separately feeding the mixture of primary air and gas to said central body

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and to said at least one external body are respectively actuated by separate taps 29. (figs. 1 and 2 depict separate inlet nozzles, or “taps.”)

With respect to claim 12, De’Longhi et al. further disclose the claimed subject matter, characterised in that the internal profile of said at least one external body presents, in plan, one or more cavities. (fig. 2, external body 4 has at least one cavity.)

With respect to claim 13, De’Longhi et al. further disclose the claimed subject matter, characterised in that said at least one external body and said central body are made in a single piece. (Elements 4 and 5 of De’Longhi are considered to be “made in a single piece,” in that they are assembled into a single unit.)

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.



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11. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over De'Longhi et al. (EP 0485645).

With respect to claim 7, De'Longhi et al. disclose all of the claimed subject matter except two or more external circumferential bodies, fluidly separated, each one of which comprises a horizontal mixing chamber with a radial Venturi effect. De'Longhi et al. does disclose a single circumferential body, fluidly separated, comprising a horizontal mixing chamber with a radial Venturi effect. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide De'Longhi et al. with a duplicate external body of the same structure because duplication of parts is considered *prima facie* obvious. MPEP 2144.04, *In re Harza*, 274 F.2d 669 (CCPA 1960).

With respect to claim 8, De'Longhi et al disclose all of the claimed subject matter except said at least one external body comprises two concentric rings of flames. De'Longhi et al. does disclose a single concentric ring of flames. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide De'Longhi et al. with a second concentric ring of flames because duplication of parts is considered *prima facie* obvious. MPEP 2144.04, *In re Harza*, 274 F.2d 669 (CCPA 1960).

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over De'Longhi et al. (EP 0485645) in view of Bettinzoli et al. (WO 02/02991)

With respect to claim 9, De'Longhi et al. disclose all of the claimed subject matter except a top covering element of said at least one external body, the upper wall of said at least one horizontal mixing chamber with a radial Venturi effect of the means for feeding said at least one

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external body coinciding with a lower wall of said covering element. Bettinzoli et al. disclose a top covering element 8 of said at least one external body 6, the upper wall of said at least one horizontal mixing chamber 14 with a radial Venturi effect of the means for feeding said at least one external body coinciding with a lower wall of said covering element. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the mixing chamber and covering element structure of Bettinzoli et al. for external body of De'Longhi et al. because it is within the purview of one of ordinary skill in the to modify known structure by substitution of one element for another known in the field to achieve a predictable result.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew St.Clair whose telephone number is 571-272-3700. The examiner can normally be reached on Monday through Thursday, 8-5 Eastern Standard Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrence Till can be reached on 571-272-1280. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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